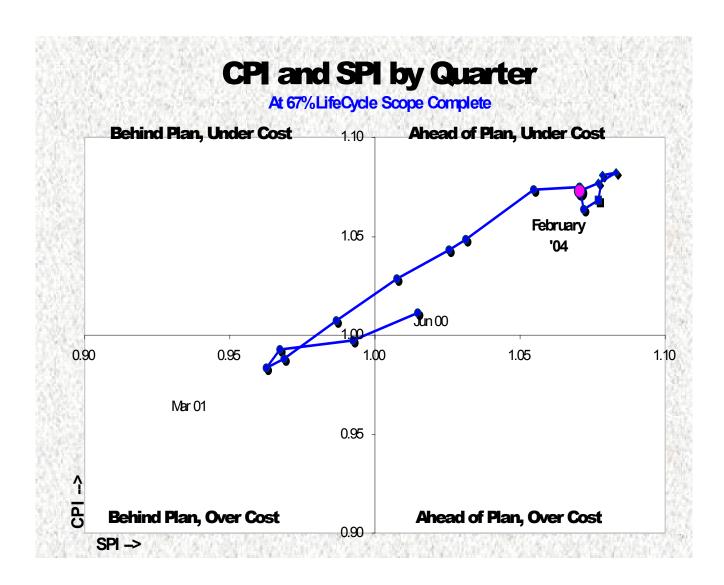
# ROCKY FLATS Monthly Project Report

FY04 February, 2004



February 2004

# **Executive Overview**

**In General**: The Closure Project is 67% complete against the contract baseline, and K-H continues to be below estimated cost and ahead of schedule. K-H continues its emphasis on working safely and maintaining compliance with procedures to ensure safe operations.

**Key Accomplishments:** D&D activities remain on or ahead of schedule. Work progressed in the nuclear buildings and on the south side of the Industrial Area with one reportable structure demolished during February. The Waste program shipped more than  $215\text{m}^3$  of TRU,  $12.323\text{m}^3$  of Low Level, and  $589\text{m}^3$  of Low Level Mixed Waste. The contractor continues excavation at the 903 Inner Lip Area. Characterization results for Buildings 371,771/774 and 374 showed no under building contamination and No Further Accelerated Actions are required.

METRIC						
Safety:	NTS Reports: 0	<b>Events of "Significant Concern" or above: 6</b>				
Bears Watching	Offsite Hospitalizations: 0 Lock-Out-Tag-Out: 0 Skin Contaminations: 1	Rad/Haz Transport Incidents: 3 Other Events: 2				
Cost Variance:	Cumulative Cost Variance = +7%, +\$181M out of ~\$2,661M BCWP <sub>CUM</sub>					
On Plan	LIFECYCLE: 67% of target scope completed; 62% of target cost expended.					
Schedule Variance:	<b>Predetermined Work Activities</b> $SV = +52\%$ , $+\$151M$ LIFECYCLE: 25% of scope scheduled; 38% of scope completed.					
On Plan	<i>Traditional Schedule Variance</i> = +7%, +\$175M LIFECYCLE: 62% of scope scheduled; 67% of scope completed.					
Critical Path	$\mathbf{CP} = \underline{\mathbf{B371}} \ \underline{\mathbf{D\&D}}, \ \underline{\mathbf{ER}} \ \underline{\mathbf{activities}}$	Estimated Completion Date: December 15, 2006				
Completion Date: <i>On Plan</i> Current CP: <i>On Plan</i>	The critical path continues to involve B371 D&D and ER activities. RFPO is continuing to use the original Target Date, December 15, 2006, as the ECD. The lack of a LLMW receiver site for waste between 10 and 100 nanocuries/gram is rapidly approaching the critical path.					
	59% (49 months) of contract duration elaps					
Key Milestones  DNFSB: none remaining	Closure Activities: One reportable demolition was achieved in February (566B). Minor demolitions included removal of 3 slabs and continued work on the 779 slab. Work continues on removal of three underground vaults and diesel tanks. The sites official heliport was removed with the associated parking lot. B-991 was readied for demolition, B-881 continues strip out and B-443 continues asbestos abatement.					
RFCA: 2004 complete	RFCA Milestones: All milestones scheduled for completion in FY 2004 are completed.					
GFS/I	GFS/I requirements are being met an	nd/or are in process except as noted here:				
Status: On Plan	Need DOE receiver site for Low Level Mixed Waste Orphans (between 10 and 100					
Forecast: Bears Watching	nanocuries/gram).					

February 2004

# **Executive Summary**

#### **Contract Status**

TC: 3.973B (Original: 3.963) TF: \$340.8M (Original: \$340M) TCD: 15 December 2006

#### **Penalty Assessment**

No Fee Penalties were issued this month. To date, four fee penalties have been issued under the terms of this contract with total penalties equaling \$510,000.

#### **Requests for Equitable Adjustments (REAs):**

One REA was received and another amended in February 2004. **AMENDED:** WIPP WAC Part III. Now includes FY02 costs and some FY03 costs associated with FY02 scope for a total estimated cost of \$4.2 million (down from \$12.1M). This adjustment was related to DCAA audit Findings and acceptable to RFPO. **NEW:** WIPP WAC Part IV for \$3.2M includes FY03 costs not specifically included in the Part III amendment. The net combined adjustment was a reduction of \$4.7 million. The National Emergency REA (Part I) remains under HQ review. The balance of the pending REAs is under RFPO review or fact-finding. No REAs have been incorporated into the contract since July of 2002.

#### Pending (Submitted) REA's: ~ \$34.7M

~\$16.4 million: National Emergency (2002 – 2003 Costs) ~\$3.2M: WIPP WAC Part IV (actual 2003 not in Part III)

~ \$5.2M: Disposition of Pu Components ~ \$2.7M: PuSPS Moisture measurement

 $\sim$  \$4.2M: WIPP WAC Part III (actual 2002 and some 2003 costs)  $\sim$  \$3.0M+ miscellaneous REAs: - System Engineers/B371 VSS - NTS WAC - PuSPS outside SRS Requirement - Be Monitoring



#### **Critical Path**

The Critical Path continues to run through B371 D&D activities, followed by site grading. RFPO is monitoring the critical path and near critical path activities resulting from the contractor's accelerated schedule and for the time being will continue to utilize December 15, 2006 as the estimated completion date.



#### **GFS/I Performance**

Most requirements have been and continue to be met. The key remaining issue is the identification of disposal sites for LLMW between 10 and 100 nCi/g activity.

Two possible sites have been identified: Hanford, and the Nevada Test Site (NTS):

- Disposal at Hanford depends upon a Record of Decision that has been delayed until March 2004.
- Disposal at NTS depends upon permit approval from the State of Nevada with no specific timeframe.

Without disposal capability, these "orphans" may need to be stored offsite at increased cost. Some may be returned to the site after treatment, only to face diminishing storage capacity as facilities are deactivated and demolished. Contingency planning for this issue has begun.



#### Safety

#### 6 Events of "Significant Concern" or Above

0 Site Noncompliance Tracking Report

Offsite Hospitalizations: 0 Rad/Haz Transport Incidents: 3 Contaminations: 1

<u>Lock-Out-Tag-Out Violations</u>: **0** <u>Other Events</u>: **2** 

**Contaminations**: Small puncture wound from B559 D&D, resulted in positive wound count. **Other**: 1) EOC activated for tunnel 991 foam fire. 2) 6ft pipe dropped thru ceiling in B444 during D&D. **Transport:** 1) Trailer discounted from tractor fifth wheel due to improperly connected kingpin. 2) Waste truck trailer struck by minivan offsite. 3) NTS found Beta on RF waste truck.

Kaiser-Hill received a Preliminary Notice of Violation on 2/3/04 with a proposed civil penalty of \$522,500 for non-compliances associated with a Building 371 plutonium uptake, a Building 776 air flow reversal, a Building 371 glove box fire and several Building 371/374 Technical Safety Requirements violations and non-compliances.

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#### **Cost Performance**



#### Cost

LIFECYCLE: 67% of scope completed; 62% of target cost expended Cost Variance +7%, +\$181M

The Cost Variance on the Project remains significantly positive, with about \$181 million in cost savings accumulated since the beginning of the contract. However, cost variance for contractual activities declined \$6M this month, falling from a positive 7.1% to a positive 6.8% variance against the baseline plan. Positive cost variances continue to be concentrated in PBD E, Industrial and Site Services Project and PBD G, the Environmental Remediation Project where accelerated D&D and IHSS remediation are resulting in significant cost savings. The majority of the negative variance is located in the 371, 707, and 771 Sub-projects.

In the 371 Project, \$3.3M in workscope took nearly \$6.3M to complete. Most of the variance was caused by an elevated degree of difficulty encountered in the building's highly contaminated dismantlement sets (Canyons). Most of the Closure Project's negative cost variance is in this PBD, in historical costs associated with PUSPS and SNM packaging. However, an additional \$4.2M in negative CV has accrued since the completion of PuSPS (July, 2003). Activities in this PBD continue to dominate the critical path.

In the 707 Project, \$2.9M in workscope took more than \$4.8M to complete this month. In addition to a higher degree of difficulty in completing the later sets, the delay in transition of steelworkers from 776 to 707 resulted in overtime costs to maintain the contractor's accelerated schedule.

In the 771 Project, \$719k of workscope took \$2.2M to complete. In this case, the fixed price contract for D&D of the Facility is \$9.5M more than the baseline estimate under the contract. Increasing negative CV is anticipated.

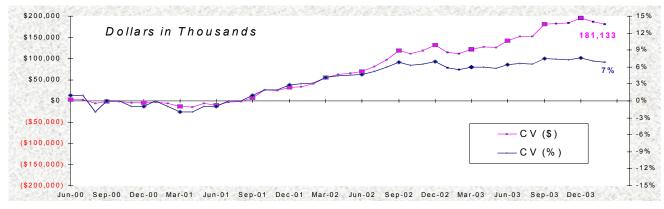
In PBD F this month, although cost variance remained positive, \$7.6M in workscope took \$11M to complete due to higher than estimated waste disposal costs and significantly higher volumes of LLW shipped.

#### **Cost Performance by PBD\*:**

Proje	ect Description	BCWP	ACWP	CV (\$)	CV (%)
1A	371 Complex Project	321,671	374,650	(52,978)	-16%
1B	707 Complex Project	193,128	206,554	(13,426)	-7%
1C	B771/774 Closure Project	221,044	224,366	(3,322)	-2%
1D	B776/777 Closure Project	194,540	184,907	9,634	5%
1E	Industrial and Site Services Project	518,058	402,042	116,016	22%
1F	Material Stewardship Project	588,623	590,093	(1,470)	0%
1G	Remediation Project	124,007	61,212	62,795	51%
1H	Engr., Environ, Safety & Quality	168,336	149,023	19,313	11%
1J	Support Project	331,637	287,066	44,571	13%
	Project Totals	2,661,045	2,479,912	181,133	6.8%

Includes all target fund sources: EY06, FS30, EW09, GG08, NN61 and YN01 (EW05 was recast to EY06 and FS 40 recast to FS30 beginning in FY04)

#### **Cumulative Cost Variance Over Time**



NOTE: Currently, the closure project has accumulated \$29.7M in non-target Site Closure (EY06) and Safeguards and Security (FS30) costs. These non-target costs are generally the result of technical direction and may eventually be considered as part of potential Requests for Equitable Adjustment, and / or will impact cost variance.

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#### **Schedule Performance**

DEFINITIONS OF ROCKY FLATS' SCHEDULE PERFORMANCE INDICATORS CAN BE FOUND IN THE GLOSSARY AT THE BACK OF THIS REPORT.



#### **Comparative Schedule Performance**

The project-level positive schedule variances reflect the contractor's continued success at accelerating workscope. The majority of accelerated activities have been in the demolition of facilities in the industrial area (PBD E), IHSS remediations in PBD G, and in waste shipping in PBD F – not on the critical path. The current critical path remains dominated by activities in Building 371 (PBD A) followed by site grading (PBD G). The only Critical Path activity where work has begun is (active storage vault and dismantlement) is \$1.8M behind schedule.

Most schedule variance metrics have decreased slightly since last month, as prior gains are offset by current delays in more highly contaminated and/or more difficult decontamination, dismantlement and clean-up activities. All the sub-projects continue to maintain a positive variance except for the B771/774 project which has dropped 13% in PWA schedule variance since January. The B771/774 project is still having difficulty achieving free release levels by hydrolazing the floors in 6 areas (four areas in 774 and two in 771). Hot spots will have to be cut out for disposal.

Project		SV <sub>TRAD</sub>	SV <sub>PWA</sub> *	SV <sub>MM</sub>	SV <sub>P3</sub> +/- Days**
1A	371 Complex Project	2%	7%	5%	231
1B	707 Complex Project	5%	19%	12%	181
1C	B771/774 Closure Project	2%	-6%	1%	-65
1D	B776/777 Closure Project	12%	29%	25%	371
1E	Industrial and Site Services Project	21%	904%	61%	246
1F	Material Stewardship Project	4%	81%	14%	260
1G	Environmental Remediation	23%	365%	26%	243
	Total Project:	7%	52%	21%	243

<sup>\*</sup>These are K-H reported values. RFPO validates and reports on PWA performance quarterly, in the Total Project Report

\*\*KH's Accelerated Working Plan



#### **P3** Completion

The K-H generated Estimated Completion Dates (using P<sup>3</sup> project scheduling software), are represented below.

The critical path continues to run through B371 D&D and site grading activities. RFPO is monitoring and will continue using the original Target Date, December 15, 2006 as the estimated completion date.

PBD	<b>Activity Description</b>	Baseline Early Finish	Statused Early Finish
Α	B371	11-Oct-06	05-Oct-05
В	B707	13-Mar-06	23-Jun-05
С	B771/774	18-Aug-04	18-Nov-04
D	B776/777	31-Oct-06	12-May-05
Ε	Industrial Sites	11-Oct-06	13-Sep-05
F	Material Stew.	13-Dec-06	24-Oct-05
G	ER	14-Dec-06	17-Nov-05
	Total Project	14-Dec-06	17-Nov-05

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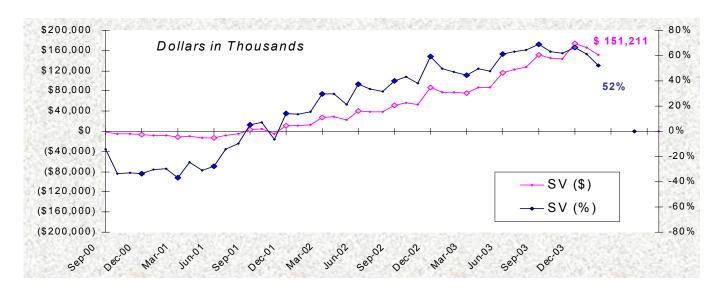


#### **Predetermined Work Activities**

 $SV_{PWA}$  (+\$151M, +52%)\*

About \$19M in critical closure scope was scheduled during the month of February, while about \$4.6M was completed. The current PWA schedule variance remains highly positive, and shows that the contractor has completed 52% more critical closure work than their baseline estimate. The current BCWS for these activities is \$289M with a lifecycle BCWS of \$1.145B. At the end of February 2004, 59% of the contract schedule had elapsed (49 out of 82.5 months), 25% of the PWA scope was scheduled for completion, and 38% (\$440M) of the PWA scope is complete.

\*These are K-H reported values. RFPO validates and reports on PWA performance quarterly, in the Total Project Report



#### PWA Schedule: Actual against Baseline Projection



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# **Project Metrics**

Project Metric	Contract Lifecycle Planned	CPB Planned to end of FY	FY Plan (AWA)	Actuals to Date	FY Actuals	Actuals for Month	LC Completion (CPB)	FY Completion (CPB)
Low Level Waste Disposed (m <sup>3</sup> )	184,475	116,662	54,000	143,332	43,731	12,323	78%	123%
Low Level Mixed Waste Disposed (m³)	44,614	10,911	3,500	32,112	5,737	589	72%	294%
TRU Waste Disposed (m <sup>3</sup> )	12,355	9,688	4,600	9,569	1,355	215	77%	99%
B371 Project Work Sets	60	33	26	25	3	0	42%	76%
B707 Project Work Sets	99	72	16	70	2	1	71%	97%
B771 Project Work Sets	106	106	35	77	6	1	73%	73%
B776 Project Work Sets	84	72	8	77	0	0	92%	107%
<b>Facilities Demolished</b>	290	141	61	150	19	0	52%	106%
<b>Nuclear Facilities Decommissioned</b>	6	2		1	0	0	17%	50%
Radioactive Facilities Decommissioned	54	14		19	4	0	35%	136%
<b>Industrial Facilities Decommissioned</b>	317	197		217	15	0	68%	110%
<b>Environmental PWAs Completed</b>	65	19	8	25	2	0	38%	132%
<b>Environmental Remediation Sites Completed</b>	360	182	24	230	39	23	64%	126%
Gloveboxes removed	1,324		277	1,209	118	66	91%	

# **Key Definitions / Terms**

#### **Rocky Flats' schedule performance indicators:**

All indicators (except P3) use the standard formula SV=BCWP-BCWS and are measured in dollars, not time. Performance is measured against the Life-Cycle Baseline as presented in June 2000 with minimal adjustments approved through our rigorous Change Control Process. The indicators defined below differ mainly in which budgeted costs are included in the analysis.

**Traditional Schedule Variance (SV**<sub>TRAD</sub>): This indicator addresses schedule performance compared to plan for the entire project contracted with Kaiser-Hill. It includes all "Target" costs as defined by the contract (EW05, EW09 (formerly EW02), FS40, GG08, YN01, and NN61). It does NOT include budgeted costs for things like performance fee, technology deployment, and program (RFFO) funds. A positive variance means that, compared to the original plan, more work was accomplished than planned. A negative variance means that less work has been accomplished than planned.

Modified Milestone Schedule Variance ( $SV_{MM}$ ): This schedule performance indicator is designed to focus on all the 'real' work at the site. It removes level-of-effort activities from the analysis, but adds the Technology Deployment budget. Again, the variance indicates that more work or less work was accomplished than planned.

Predetermined Work Activities Schedule Variance ( $SV_{PWA}$ ): In order to best assure that the government is awarding performance fee for the accomplishment and acceleration of the most important work at Rocky Flats, our contract with Kaiser-Hill includes a list and schedule of ~900 "Predetermined Work Activities" against which performance is measured and provisional fee is paid. Generally,  $SV_{PWA}$  calculations allow for earning value only when an activity is 100% complete (all or none), unless the activity is a quantity-based measure. These activities represent critical work necessary to the timely closure of the Site, and performance is measured against the baseline schedule set out at the beginning of the contract. Although the contractor is free to realign specific work activities as they see fit, the dollar amount of work accomplished against these critical activities is expected to remain on plan to facilitate timely closure of the site.

**Primavera Project Planner Schedule Variance (SV<sub>P3</sub>):** In contrast with the previous indicators, the P3 schedule variance is measured in units of time (days). The Primavera project scheduling software computes the longest (critical) path through the contractual work on the Project and arrives at the Statused Early Finish, (a.k.a. Estimated Completion Date). Variance is measured against the Baseline Early Finish as established in June 2000.

**Orphans – Low Level Mixed Waste Orphans.** Wastes which must be removed from the Site but for which no disposal / treatment path has been identified and/or approved.

**D&D** – **Deactivation and Decommissioning.** Deactivation: the process of placing a "building" in a safe and stable condition. Decommissioning: All activities that occur after deactivation. Includes decontamination and dismantlement /demolition.

- PBD A 371 Complex Project. Remaining D&D. Building demolition by October 11, 2006.
- PBD B 707 Complex Project. Remaining D&D. Building demolition by March 1, 2006.
- **PBD** C 771 Complex Project. Remaining D&D. Building demolition by August 4, 2004.
- **PBD D 776 Complex Project.** Remaining D&D. Building demolition by October 27, 2005. Removal of the slab/foundation by 4/26/06 and project completion by 10/31/06.
- **PBD** E **Industrial** / **Site Services Project**. The industrial and site services portion of the RISS Project, and other bldg D&D.
- **PBD F Material Stewardship Project.** Technical program direction and operational support for commodities, engineered services, procurement, traffic & transportation, and disposition of waste.
- **PBD G Remediation Project**. The Environmental Restoration (ER) Program is included in the RISS Project. The overall scope is to cleanup IHSSs, PACs, UBCs, and ground water plumes through accelerated actions under CERCLA and RFCA.
- **PBD H Engineering, Environmental, Safety, Quality, and Health**. Infrastructure. Includes; project management, assessment, oversight, regulatory compliance and monitoring, waste certification, technical training, Nuclear Safety and Licensing, Criticality Safety, Fire Protection, Engineering, Safety/Work Control, and Radiological Protection.
- **PBD J Support Project**. General Counsel & Audit (GC&A), Strategic Planning & Integration, Administration, and the K-H Executive Office.

Executive Office.